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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/506,033	02/16/2000	Yasushi Kubota	49087-CIP(820)	5865

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EXAMINER

TRAN, HENRY N

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 02/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/506,033	Applicant(s) KUBOTA ET AL.	
	Examiner HENRY N TRAN	Art Unit 2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 18-21, 37-53 and 58-64 is/are pending in the application.
- 4a) Of the above claim(s) 37-53 and 58-64 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 18 and 19 is/are rejected.
- 7) ☒ Claim(s) 2, 3, 20 and 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 February 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/10/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicants' Response received 9/10/04 has been entered. Claims 1-3, 18-21, 37-53, and 58-64 remain pending in this application. The examination results are as follows.

Election/Restrictions

1. Applicants' election without traverse of claims 1-3 and 18-21 in the reply filed on 9/10/04 is acknowledged.

Information Disclosure Statement

2. The examiner has considered the references submitted with the Information Disclosure Statement (IDS) received 9/10/04 (see the attached form PTO-1449).

Specification

3. The specification is objected to because it refers to the claims, which may be withdrawn, or amended, or canceled during the examination process (see Specification, page 113, line 11; page 115, line 23; page 119, line 5; and etc.). Applicants are required to review the Specification for deleting all the references to the claims.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

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such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 18, 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubota et al (U.S. Patent No. 6,437,768; and hereinafter "Kubota") in view of Maekawa et al (U.S. Patent No. 5,646,642; hereinafter "Maekawa").

Re claims 1 and 18, Kubota teaches a shift register circuit 1 having a plurality of latch circuits LAT_{ij} for transmitting a pulse signal ST for latching image data VIDEO in synchronization with a clock signal CK_{ij}; each of the latch circuit comprising: a first input pulse signal IN; a second input clock signal CK_{ij}; and an output pulse signal OUT_{ij}, which is in synchronization the clock signal; a clock signal input control section CRL_i; see Figs. 2, 3 and 9; col. 7, line 36 to col. 8, line 19. However, Kubota does not teach the clock signal has an amplitude smaller than an amplitude of the pulse signal. Maekawa teaches a level shifting circuit 2 for converting an input clock signal CK₁ level having a low amplitude up to an output clock signal Vout having a high amplitude; see Figs. 1, 2 and 4; col. 4, lines 50-62. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the level shifting circuit using a low amplitude clock signal as taught by Maekawa in the Kubota device because this would provide an improved level shifter circuit having a reducing operating clock voltage level and a reducing chip size, which would reduce the power consumption on the clock signal lines, and would improve circuit layout arrangements. By this rationale, claims 1 and 18 are rejected.

Re claim 19, Kubota further teaches the use of an antiphase clock signal. See col. 8, lines 25-27. Claim 19 is dependent upon the base claim 18, and is therefore rejected on the same reasons set forth in claim 18, and by the reasons discussed above.

Allowable Subject Matter

6. Claims 2, 3, 20 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments with respect to claims 1-3 and 18-21 have been considered but are moot in view of the new ground(s) of rejection as discussed above.

8. Applicant's arguments with respect to non-elected claims 37-53 and 58-64 have been noted.

Conclusion

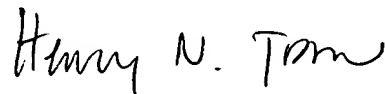
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HENRY N TRAN whose telephone number is 703-308-8410.

The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHARD A HJERPE can be reached on 703-305-4709. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink that reads "Henry N. Tran". The signature is written in a cursive, flowing style.

HENRY N TRAN
Primary Examiner
Art Unit 2674

2/11/05